DOCUMENT RESUME

ED 189 637 CS 205 723

AUTHOR Fox, Roy F.
TITLE Treatment of Writing Apprehension and Its Effects on Composition.
PUB DATE 79
NOTE 36p.; : Research performed at the University of Missouri-Columbia. Best copy available.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS College Freshmen; *Conventional Instruction; *Experimental Teaching; Higher Education; Learning Theories; Research; Student Interests; Teaching Methods; *Writing (Composition); *Writing Instruction; *Writing Research
IDENTIFIERS *Writing Apprehension

ABSTRACT

A 16-week study to investigate the effects that two methods of teaching writing had on writing apprehension and on overall quality and length of student writing involved over 100 college freshmen enrolled in English Composition classes. Except for the methods of writing instruction, both control and experimental group conditions were held constant, including class hours, number of words assigned, and choice of topics. Daly and Miller's writing apprehension test was administered at the beginning and end of the experiment along with a two-hour posttest writing sample. A summary of the features of the experimental treatment includes: (1) introductory large group interaction activities; (2) paired-student problem solving; (3) small group problem solving; (4) instruction in peer evaluation; (5) introductory large group "what to look for" practice; (6) small group sustained peer evaluation; (7) specific essay objectives; and (8) a six-step instructional sequence preceding each essay. Conclusions drawn from the data were that students' writing apprehension was reduced using either method but at a faster rate with the experimental method and that the experimental treatment produced writing that was as proficient in overall quality as that produced by the conventional treatment and significantly longer. (AEA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED189637

21

TREATMENT OF WRITING APPREHENSION AND ITS EFFECTS ON COMPOSITION

Roy F. Fox

In the past two decades, writers and theorists (Macrorie, 1976; Moffett, 1976; Elbow, 1973; Beaven, 1977; and Rogers, 1971) have argued for collaborative approaches to student learning, allowing for students to "unlearn" inhibitions by engaging in "helping circles," or peer evaluation, where the discovery of student strengths and the subsequent building on these strengths are given instructional priority. More generally, these theorists fit into Maslow's (1954) "self-actualization" theory, which posits that man naturally seeks to become everything that he can if he is sufficiently motivated.

Especially for teachers of composition, a major underlying assumption of these writers and the various student-centered methods they espouse, is that a reduction of "writing apprehension" (Daly and Miller, 1975) must first occur before students can reverse their inhibitions about writing and its subsequent evaluation, develop fluency in their writing, and cultivate confidence in their writing.

Remedial and introductory college composition classes are populated with students embarking upon their writing experiences with not only a lack of basic skills, but with defeatist attitudes toward their composing abilities and the act of writing itself. Such students avoid both writing and evaluations of their writing. Kelly (1975) describes the dilemma of such students, who constantly hear "The Voice of Authority" and feel the threat of "The Superior Intellect" when they attempt to

CS205723

BEST AVAILABLE COPY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Roy F. Fox
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

write. Shaughnessy (1977) illustrates how one such student's writing--through a series of faltering beginnings and revisions--eventually disintegrates. About this student and others like him, Shaughnessy states that

> He is aware that he leaves a trail of errors behind him when he writes. He can usually think of little else while he is writing . . . Some writers, inhibited by their fear of error, produce but a few lines an hour . . . . (p. 7)

This wavering of basic writers during the actual composing stage was most recently observed in a study that examined the composing processes of traditional and remedial college freshman (Pianko, 1979). In this study, the traditional writers wrote at a much faster pace than the remedial writers. Pianko reported that remedial writers' composing processes were characterized by "hesitations"--not the pauses used for thought or diversion that were more frequently observed in the behavior of the better writers. Interviews with the remedial writers conducted immediately after observations revealed that only a limited number of them were concerned with the content or the ideas in their writing. Pianko concluded that an over-concern for mechanics and usage and correct wording during the composing stage was responsible for remedial students' slower writing pace.

The empirical development of an instrument to reliably measure such apprehension about writing (Daly and Miller, 1975) enabled this investigator to ask: Do student-centered methods of teaching composition

(Macrorie, 1976; Moffett, 1976; et al.) measurably reduce writing apprehension more than conventional, teacher-centered methods? And if they do, how does this reduction affect students' written products?

PURPOSE OF THE STUDY

The purpose of this study was to investigate the effects two methods of teaching writing had on writing apprehension. Another purpose was to investigate the effects these two methods had on overall quality of student writing and length of student writing. The first method of instruction (conventional) involved teaching writing primarily through writing exercises, lecture, discussion, and question-answer sessions. In this method, all student writing, generally instructed to adhere to traditional rhetorical modes, was exclusively instructor evaluated. Response, feedback and criticism to student writing stemmed solely from the instructor. The second method of instruction (workshop) involved large-group interaction exercises, paired-student and small-group language problem solving activities, freewriting, practice responses to writing, structured peer response to writing which graduated from exclusively positive comments to positive-negative comments, and two instructor-student conferences. Also included in this method were specific "instructor taught" objectives for each essay.

The purpose of the experimental treatment outlined above was threefold. First, this treatment made an attempt to provide a safe environment for the apprehensive writer to sequentially ease into developing a trust of communication situations (from participating in

singular, then paired, then small-group problem solving tasks). Second, this treatment made an attempt to sequentially ease the apprehensive writer into a healthy acceptance of critical evaluation of his own writing (from giving and receiving initially positive feedback from peers, to eventually giving and receiving positive-negative feedback from peers). Third, this treatment made an attempt to provide the specificity and structure that would observably improve selected writing skills (from participating in a structured procedure for response to writing, specific pre-taught skills objectives for each essay, and instructor-student conferences).

HYPOTHESES

The following hypotheses were tested:

Hypothesis 1: that all students involved in the experimental group would report a significant reduction in writing apprehension as measured by pre and post WAT scores.

Hypothesis 2: that all students involved in the control group would retain their original levels of writing apprehension as measured by pre and post WAT scores.

Hypothesis 3: that all students (not just the highly apprehensive writers) in the experimental

group would report significantly lower levels of writing apprehension at the end of the study than would all students in the control group.

Hypothesis 4: that students ranked highest in writing apprehension at the beginning of the study in the experimental group would report significantly lower levels of writing apprehension at the end of the study than would similarly ranked students in the control group.

Hypothesis 5: that students ranked highest in writing apprehension at the beginning of the study would write post test compositions that would be evaluated by two independent judges as significantly higher in overall quality than would the post test compositions completed by similarly ranked students in the control group.

Hypothesis 6: that all students (not just the highly apprehensive writers) in the experimental group would write post test compositions that would be evaluated by two independent judges as significantly higher in overall quality than

would post test compositions completed by all students in control group.

Hypothesis 7: that students who ranked highest in writing apprehension at the beginning of the study in the experimental group would write significantly longer post test compositions than would similarly ranked students in the control group.

Hypothesis 8: that all students (not just the highly apprehensive writers) in the experimental group would write significantly longer post test compositions than would all students in the control group.

SUBJECTS

Subjects for this research were six (6) intact classes (n=106) of freshman male and female students enrolled in English Composition at the University of Missouri-Columbia during the spring semester of 1978. All students assigned to this class were so placed because they had T-scores of below 49 on the "Missouri College English Placement Test." Students who had 1) previously failed Composition I, 2) had excessive absences throughout the semester, and 3) had either dropped the class or dropped out of school before the end of the semester were excluded

as subjects. The majority of these students came from either the large urban areas of St. Louis or Kansas City, or from smaller rural areas around Missouri. A small percentage of students came from out of state. The majority of students were between eighteen and nineteen years of age.

PROCEDURE

Three graduate instructors taught one experimental and one control section each throughout the sixteen-week period. Two of the instructors were doctoral candidates in English Education and one instructor had just completed a Master's Degree in English. All instructors had several years of experience teaching both high school English and college level composition courses. Prior to this study, all three instructors had been exposed to the theory of workshop instruction, but had no direct experience using it in their classes. They also had no previous experience with this study's particular experimental treatment, but each instructor had experience with the control group methodology.

The researcher and instructors met approximately two hours each week of the experiment, in addition to one meeting at the beginning and conclusion of the semester. These sessions included discussion of various mechanical procedures, discussion of various student personalities, discussion of objectives and topics for essays, and the delineation of sequential steps for instruction and presentation of

various concepts. Every attempt was made in these meetings and in informal consultation, to insure that each instructor was teaching the same material in the same sequence and manner. In addition, the researcher was able to sit in on each instructor's class as an anonymous observer of experimental processes.

All classes met for fifty minutes, three times per week. A rough uniformity was achieved in the times the classes were scheduled.

The three control groups each completed five outside of class essays, along with numerous in class paragraphs and exercises. The three experimental classes each completed seven out of class essays along with one freewriting per week and occasional in class writing exercises. A tally of the number of words written by both groups revealed them to be approximately equal.

For assigned essay topics, both experimental and control groups selected from the same pool of topics; each student in the control group chose his own, while students in the experimental group had to reach consensus in their small peer evaluation groups so that all group members wrote on the same topic. Thus, choices in both experimental and control groups were restricted to identical alternatives.

All topics were selected or created in accordance with four criteria: 1) they had to be clearly and concretely worded; 2) they had to involve a variety of contemporary issues rather than obscure or historical questions; 3) they had to elicit varied kinds of writing, and 4) they had to arouse some interest and had to be intellectually challenging for college freshman.

The assignment of midterm and final course grades was held constant across conditions. In control groups, grades were assigned by instructors to each essay. Instructors handled the grading of in class work, participation, and attendance as they normally did in their previous "conventional" teaching practices. Hypothetically, a lesser emphasis on grades in experimental groups could do much to reduce writing apprehension, but this was deemed to be an unrealistic approach. Consequently, an attempt was made in experimental groups to reduce writing apprehension without ignoring or trivializing the importance of grades. Accordingly, no grades were given by experimental group instructors for each essay after it was completed, but prior to the two instructor-student conferences (at midterm and at semester's end), students completed written evaluations indicating the grade they thought their writings and revisions deserved. They were urged to be realistic and to support their evaluations by pointing out specific improvements in their essays. At this time, through discussion and mutual agreement, instructors gave tentative grades to students based on their best two papers. For final course grades, instructors based their judgments on the best two papers from the midterm conference, plus the last three essays completed after the conference. Out of these five essays, then, the best three were selected to constitute the bulk of students' course grades.

TREATMENT

In control groups, all response to student writing came from

instructors. Control group instruction in essay organization focused on traditional rhetorical modes. Other conventional methods included lecture, instructor-led discussion, question and answer sessions, and writing exercises.

All instructors had no previous experience whatsoever with this particular experimental treatment, which emphasized both positive reinforcement and skills development. Because of the lack of research precedents for treatment of writing apprehension, it was deemed premature to examine the independent effects that skills modification and reinforcement might have on students' writing apprehension and the quality of their writing. Previous research dealing with skills modification and the peer group (Auger, 1970; Lagana, 1972; and Sager, 1973), factors that influence teacher-evaluations of student writing (Metzger, 1977 and Harris, 1977), teacher-perceived causes of writing apprehension (Daly, 1978), as well as research dealing with positive reinforcement's effect on promoting more positive attitudes toward the writing act (Hartig, 1966; Clarke, 1969; Ford, 1973; Stevens, 1973, and Weisberg, 1977) pointed toward this dual approach.

A brief summary of additional salient features of the experimental treatment appear below in the same sequence as they were used:

1) Introductory Large-Group Interaction Activities: Included a "Signature Hunt" in which students were given a list of one-line descriptions ("I have shaken hands with at least two famous people.") and were instructed to wander amongst each other and obtain the signatures of all other class members

next to the "appropriate" descriptions. (Approximate time: 20 minutes.)

Also included was a brief "non-written" composition in which each student brought two objects to class and in about five minutes, explained the connections and relationship the objects had to them. The objects were to somehow "symbolize" their owners. (Approximate time: two class sessions)

2) Paired-Student Language Problem Solving Activities: Students worked in pairs only. These problems were designed to give students practice and reinforcement in talking with each other in order to solve a problem. With each new problem presented (high interest "language dilemmas") which students had ten to fifteen minutes to solve, they had to switch partners. (Approximate time: one class session)

3) Small-Group Language Problem Solving Activities: These were designed to give students nongraded practice in solving problems in small groups of four to five students. With each new problem (which groups had fifteen minutes to solve), students switched groups so that they were working with a new set of people for each task. An example of this kind of task was to have groups "translate" nursery rhymes written in doublespeak. (Approximate time: one class session)

4) Instruction in the Peer Evaluation Process: Each student was asked to read Chapter four from Elbow's Writing Without Teachers (1973), which carefully outlines workshop process in simple and lucid terms. This chapter, along with a list of "musts" for workshop participants prepared by the researcher, was assigned and then thoroughly discussed by instructors and their students. Several reviews and a nongraded quiz on the procedures insured that students understood the steps in this method, along with the basic rationale for using it.

5) Introductory Large-Group "What-To-Look-For" Practice: Before peer groups were formed, the instructors led their classes through three examples of student papers (from the previous semester) and questioned students about the papers' possible good points, and also pointed out desirable elements in the papers which students overlooked. Students had copies of all papers under discussion. The key was variety--as many different qualities as possible were reviewed, such as smooth transitions and sentence structure variety. In these initial practice evaluations, only positive responses were practiced, with the example papers demonstrating sufficiently high quality--"good" writing, but not necessarily excellent--so that a variety of positive comments could be made. An excerpt from a professional writer, skilled and fluent, was judged to be too "unreachable" for Composition I students; thus realistic goals were set by example.

6) Small Groups for Sustained Peer Evaluation: Small-group procedures followed were distilled from Macrorie (1977), Elbow (1973), Hawkins (1976), and Beaven (1977). The first essay was restricted to positive feedback only. Subsequent responses had to be either positive or positive-negative; solely negative feedback was never allowed. In addition to other kinds of responses, each student had to discuss whether or not the essay in question had correctly fulfilled specific assigned objectives. All essays were reproduced so that each student had copies of everyone else's writing. Instructors checked on small group progress by acting as participants in each group, alternating groups, striving for equal time with each group, making allowances for more time if a particular group required the attention. Instructors sometimes needed to act as catalysts to get slow groups moving at a faster pace, as well as to get fast groups to slow to a reasonable pace. Instructors' attitudes and behaviors with small groups were discussed and clarified in the weekly meetings with the researcher. They were encouraged to serve as role models for variety in response, tactfulness, sensitivity, and depth in the quality of their feedback.

7) Specific Objectives for Each Essay: Throughout the semester, instructors and researcher examined students' in class free-writings (one each week) and out of class essays to determine

students' most common skills deficiencies. The limited specific objectives for each essay were selected to remedy these observed problem areas. Then, there was an attempt to match or correlate these objectives with essay topic choices so that the topics would easily lend themselves to student illustration and demonstration of the objectives. Next, accompanying reading assignments were chosen which explained, illustrated, and provided reinforcement exercises for whatever skills the objectives demanded. Most assignments for reading came from the Harbrace College Handbook by Hodges and Whitten (1977). No specific objectives were used for the first essay in an attempt to initially emphasize each paper's overall and whole effects; fragmented microviews of writing that invariably accompany criticial analysis, it was judged, would be stressed soon enough. Objectives ranged from avoidance of sentence fragments to fresh use of simile and metaphor.

8) Instructional Sequence Preceding Each Essay: For each of the seven papers, the same "instructional cycle" was followed. A brief description of the six major steps in the cycle follows:

Step 1: large-group clarification of objectives sessions-- Instructors first wrote the specific objectives on blackboard and then, in their own words, simply explained what the objectives meant.

Step 2: large-group oral and written practice of objectives sessions--Next, instructors led students through selected oral and written exercises that enabled students to perform and practice the selected objectives.

Step 3: identification and discussion of superior and inferior uses of objectives within students' own past writing--For "in context" illustration of objectives, instructors selected from all past writings. If instructors could not find examples of objectives they were seeking from the work of their own students, they next turned to a collection of student papers from previous semesters (Jobst and Batesel, 1977). This was done to illustrate objectives in as immediate and as authentic a context as possible.

Step 4: actual writing of essays--The necessity for each peer group to reach consensus on topics created a need for students to exchange ideas and views on what they would write, and how they would approach the topic. Actual writing always occurred outside of class. Required length of essays was one full page, preferably typed and single-spaced. When

short papers were turned in, instructors promptly returned them and asked students to produce at least one full page.

Step 5: peer group evaluation sessions--(See number six above, "Small Groups for Sustained Peer Evaluation")

Step 6: individual revision of writing--After peer evaluation sessions, students were given ample opportunity for revision of all papers. Revision was given extensive attention during both peer sessions and on the days that essays were due. On these "due days," since there was no time to reproduce papers and immediately begin group work, instructors concentrated on revision tasks of past student papers.

ANALYSIS

Two instruments were used to gather data: the Writing Apprehension Test (Daly and Miller, 1975) and a two-hour post test writing sample. The Writing Apprehension Test, administered at the beginning and end of the experiment, is a twenty-six item scale used in numerous research studies since its initial testing. An analysis of variance on the Writing Apprehension pre tests revealed no significant differences in writing apprehension levels between all experimental and control group

students at the beginning of the study. To achieve this initial relative equality across conditions, it was necessary to eliminate some subjects high in writing apprehension. This elimination was also necessary in determining the ten highest writing apprehensives in each of the six groups so that these highly apprehensive subjects could serve as a selective sample for analysis. The elapsed time between Writing Apprehension pre tests and post tests was sixteen weeks.

The post test writing sample administered at the end of the study was controlled across conditions in terms of time, topic, type of writing elicited, time allowed for completion, and procedure of administration. Essays were holistically scored by two trained and experienced raters. The scoring procedure involved initially having the raters independently rate two sets of "practice essays" written by high school seniors on the same topic as the essays completed by this study's college freshmen. These essays did not substantially differ in error frequency, style, tone, or approach to the topic. For the first set of practice essays (n=24), each rater worked at home independently. From this initial set, raters selected the two best, the two average, and the two worst essays and then created criteria for judging such papers. Next, the raters met with the researcher and discussed their derived set of evaluational guidelines as well as their disagreements about the ratings of particular papers. Both raters had essentially selected the same criteria for evaluation and easily agreed upon a common set of standards to use for this study's

test essays. Then, both raters revealed which essays they had independently chosen as the two best, two average and two worst and discussed their choices. Raters next independently rated a second set of practice essays (n=10) and discussed their discrepancies of more than two points. After independently judging every ten essays from the actual study, raters stopped and discussed scores that differed on more than two points. Raters were required to take periodic rest breaks. The investigator would have served as a third judge when disputes could not be settled, but this was not necessary. A Pearson Product Moment Correlation Coefficient on the raters' adjusted score evaluations (n=110) proved to be .92.

The independent variables for this study were three (3) instructors and two (2) methods of teaching writing. The three dependent variables included 1) level of students' writing apprehension, 2) number of words per essay in students' writing, and 3) overall quality of students' writing. A two-way analysis of variance was carried out for each of the three dependent variables to check for significant differences between experimental and control groups. Two of the analyses (for hypothesis numbers one and two) contained repeated measures. The .05 level of significance was selected for all analyses of data.

RESULTS

Results of the analysis revealed that statistically significant differences existed between means for experimental and control groups

for four of the eight hypotheses investigated. Hypothesis one was accepted and hypothesis two was rejected: both experimental and control groups showed a significant decrease in writing apprehension from the beginning to the end of the study. However, the experimental group was significantly lower in writing apprehension than the control group at the end of the sixteen weeks, thus confirming hypothesis three (see Table 1).

Place Table 1 about here

In addition, the experimental group's preselected high apprehensive writers reported significantly lower levels of writing apprehension than the control group's preselected high apprehensive writers, warranting acceptance of hypothesis four. Hypotheses five and six were rejected. Neither the experimental group as a whole, nor the preselected high apprehensive writers within the experimental group, wrote post test essays of significantly superior overall quality when compared to control group counterparts. Though not significantly different, an inspection of the overall quality mean scores for both comparisons (highs only and entire group) reveals trends that favor experimental students (see Tables 2 and 3).

Place Tables 2 and 3 here

For hypothesis seven, although the total number of words written per essay by the high apprehensive writers in the experimental and control groups did not prove significantly different, an examination of the mean scores (again see Table 2) reveals that the experimental group writers produced approximately 49 more words per essay than control group writers. When all writers from both groups were compared for length (hypothesis eight), the experimental group writers wrote significantly longer post test compositions than their control group counterparts. This difference occurred at the .056 level of confidence (see Table 4).

Statistical analysis revealed no interactions between instruction and treatment.

Place Table 4 here

DISCUSSION

Examination of the data warrants four main conclusions. First, students' fear and avoidance of writing and of having their writing evaluated can be significantly reduced using either method investigated. Second, the sequential and largely student-centered experimental treatment significantly reduced writing apprehension at a faster rate than conventional instruction. Third, the experimental treatment produced writing at least as proficient in overall quality as the writing produced by conventional composition instruction. Fourth, the experimental method produced essays that were significantly longer than essays produced by the control method.

It must be clearly noted at this point that it is neither morally just nor academically wise to reduce writing apprehension (or any kind of academic anxiety) by indoctrinating students with false or sugar-coated notions about their own abilities. This study made every attempt to avoid leading students to believe they were better writers than they actually were. However, a conscious attempt was indeed made to make students aware of the positive qualities that they initially demonstrated in their own writing, and to continually note these qualities as they developed and became more visible in their written expression. For instructor-student conferences, instructors were encouraged to be honest but tactful. A number of the weekly instructor-researcher meetings involved discussion of student psyches. When students wrote about their own achievements and suggested grades for themselves, they were asked to do so in as realistic and accurate a way as possible. Before the final instructor-student conferences, all students were assigned to read a humorous essay, "Belief in Receiving an A" (sic) by Frank Parks (1978), which poked fun at students' various reasons for requesting an "A" when a self-evaluation was requested from their English instructor. It was hoped that these attempts would prohibit inflated student perceptions of their own writing abilities--and at the same time not snip the buds of self-confidence that the experimental treatment attempted to cultivate. Hence, it is the observation of this researcher that the considerable reduction of writing apprehension that did occur was accomplished without falsely building student writing egos.

In a 1975 article that first considered any method for the reduction of writing apprehension, Daly and Miller stated that

> The procedure commonly used of forcing students to write is very likely the wrong choice of treatments. All one is doing is reinforcing the punishing nature of the writing act in those situations. (1975, p. 248)

All of the findings of this study contradicted the above prediction. Experimental students were indeed "forced" to write. But the main question for composition teachers raised by this project's results is that they consider how they force their students to write. There are several findings that underscore the uniformity of the experimental methodology's effects.

With no significant differences found in Writing Apprehension Test means between the two groups at the beginning of the study, by semester's end, experimental groups achieved lower writing apprehension levels at a faster rate than did control groups.

Second, an inspection of the data of each hypothesis that was found to be nonsignificant revealed means that consistently favored experimental groups. For example, even though there were no significant differences between experimental and control groups on overall quality of post test essays, the experimental groups finished higher than control groups (7.9 compared to 7.1), thus warranting the conclusion that composition instruction that is similarly structured can produce

writing at least as good as that produced in conventional composition classes.

A third finding which emphasized the cleanliness of the experimental methodology was that statistical analysis found no interactions between instructors and treatment. Thus, provided with only two-hour weekly training sessions, instructors became sufficiently skilled to apply the experimental treatment with consistent results.

Another result of the study was that a significant difference existed between the length of the experimental group's post test essays and the control group's post test essays (at the .056 level of confidence). With variables held constant, the control group's mean essay length was 533.7 words per essay, while the experimental group students (who also at this time reported significantly lower levels of writing apprehension than their control group counterparts) wrote an average of 610.2 words per essay. Experimental students' increased fluency parelleled the findings of both Gee (1972) and Stallard (1974) who likewise found increased fluency in the presence of positive attitudes toward writing. This finding becomes especially important if one considers fluency in writing to be a prerequisite to skills development.

Although experimental groups considered as a whole wrote significantly longer essays than students in control groups, this was not the case when only the high apprehensive writers for each group were analyzed for their average number of words per essay. High apprehensives in experimental groups averaged 560.8 words per essay, while their control group counterparts averaged 512.3 words per essay. While this difference was not statistically significant, it heavily favored experimental

groups by an average of 48.5 words. Although this gain in length is considerable, it is possible that a longer treatment period was needed for the production rate of high apprehensive writers to increase to a statistically significant level.

Experimental students' reduction of writing apprehension, their comparable overall quality of writing, and their increased flow of words constitute yet another piece of empirical support for structured, student-centered methods of teaching writing. Moreover, these results point toward both confidence in the act of writing and a healthy acceptance of its subsequent evaluation, as comprising the nutritious kind of soil that is necessary for beginning writers to firmly take root.

References

Auger, T. Some effects of peer evaluation on the performance of elementary education students (unpublished doctoral dissertation, 1970). Dissertation Abstracts International.

Beaven, M. H. Individualized goal setting, self-evaluation, and peer evaluation. In C. Cooper and L. Odell (Eds.), Evaluating Writing. Urbana: National Council of Teachers of English, 1977.

Clarke, G. Interpreting the penciled scrawl: a problem in teacher theme evaluation (Unpublished M. A. In Teaching thesis, University of Chicago, 1969).

Daly, J. A. Writing apprehension in the classroom: teacher role expectancies of the apprehensive writer. Research in the Teaching of English, 1979, 13, 37-45.

Daly, J. A., & Miller, M. D. The empirical development of an instrument to measure writing apprehension. Research in the Teaching of English, 1975, 9, 242-250.

Elbow, P. Writing Without Teachers. New York: Oxford University Press, 1973.

Ford, B. The effects of peer editing/grading--on the grammar-usage and theme-composition ability of college freshmen, (Unpublished doctoral dissertation, University of Oklahoma, 1973). Dissertation Abstracts International.

Gee, T. Students' responses to teacher comments. Research in the Teaching of English, Fall 1972, 6, 216-223.

Harris, W. H. Teacher response to student writing: a study of the response patterns of high school English teachers to determine the basis for teacher judgment of student writing. Research in the Teaching of English, Fall 1977, 11, 175-185. (No. 2)

Hartig, H. Student attitudes and purposes in writing. Wisconsin English Journal, October 1970, 13, 33-36.

Hawkins, T. Group Inquiry Techniques for Teaching Writing. Urbana: National Council of Teachers of English, 1976.

Hodges, J., & Whitten, M. Harbrace College Handbook. New York: Harcourt Brace Jovanich, Inc., 1977.

Jobst, J., & Batesel, P. Comp 1. Columbia: Lucas Brothers Publishers, 1977.

Kelly, L. Toward competence and creativity in an open class. In R. Ohman & W. B. Coley (Eds.), Ideas for English 101. Urbana: National Council of Teachers of English, 1975.

Keppel, G. Design and Analysis: A Researcher's Handbook. Englewood Cliffs: Prentice-Hall, Inc., 1973.

Lagana, J. The development, implementation, and evaluation of a model for teaching composition which utilizes individual learning and peer grouping (Unpublished doctoral dissertation, University of Pittsburg, 1972). Dissertation Abstracts International.

Macrorie, K. Writing To Be Read. New York: Hayden Book Co., 1976.

Maslow, A. Motivation and Personality. New York: Harper & Row, 1954.

Metzger, E. Causes of failure to learn to write: Exploratory case studies at grade seven, grade ten and college level, (Doctoral dissertation, State University of New York at Buffalo, 1977). Dissertation Abstracts International, 3346A.

Moffet, J. Teaching the Universe of Discourse. Boston: Houghton Mifflin Company, 1976.

Parks, A. F. "Beleif in Recieving an A," The Arkansas Gazette, January 4, 1978, 1b & 3b.

Pianko, S. A description of the composing processes of college freshman writers. Research in the Teaching of English, 1979, 13, 37-45.

Rogers, C. The interpersonal relationship in the facilitation of learning. In D. Avila, A. Combs & W. Purkey (Eds.), The Helping Relationship Sourcebook. Boston: Allyn and Bacon, Inc., 1971.

Sager, C. Improving the quality of written composition through pupil use of rating scale. Ann Arbor, Michigan: University Microfilms, 1973. Order no. 73-23 605.

Shaughnessy, M. Errors and Expectations. New York: Oxford University Press, 1977.

Stallard, C. Writing behavior of good student writers. Research in the Teaching of English, 1974, 8, 214-222.

Stevens, A. E. The effects of positive and negative evaluation on the written composition of low performing high school students (Unpublished doctoral dissertation, Boston University, 1973), Dissertation Abstracts International.

Weisberg, J. L. The motivations and effects of daily creative writing (Doctoral dissertation, University of Michigan, 1977). Dissertation Abstracts International, No. 77-26-187.

TABLE 1

Two-Way Analysis of Variance of Writing Apprehension Post Test Scores

Between Experimental and Control Group

Source	D. F.	Sum of Squares	Mean Square	F Value	PR > F
Instructor	2	882.399	441.199	2.06	0.1332
Treatment	1	1,141.020	1,141.020	5.32	0.0231*
Instructor X Treatment	2	419.733	209.866	0.98	0.3794
Error	100	21,445.497	214.454		
Total	105	23,888.650			

*Significant at .05 level.

TABLE 2

Overall Quality and Length Means for All Writers in Experimental and Control Group

Group	Number	Overall Quality Mean	Length Mean
Experimental	55	7.909	610.236
Control	52	7.346	533.788

TABLE 3

Overall Quality and Length Means for High Apprehensive Writers in Experimental and Control Group

Group	Number	Overall Quality Mean	Length Mean
Experimental	29	7.931	560.827
Control	31	7.161	512.387

TABLE 4

Two-Way Analysis of Variance of Post Test Compositions' Length Scores Between Experimental and Control Group

Source	D. F.	Sum of Squares	Mean Square	F Value	PR>F
Instructor	2	131,017.198	65,608.595	1.56	0.2152
Treatment	1	156,211.642	156,211.642	3.72	0.0566*
Instructor X Treatment	2	10,670.637	5,335.318	0.13	0.8808
Error	101	4,241,768.764	41,997.710		
Total	106	4,837,567.601			

*Significant at .056 level.